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Handbook for Developing Watershed Plans to Restore and Protect Our Waters

Cover, Disclaimer, Contents, and Acronyms and Abreviations

October 2005

Handbook for Developing Watershed Plans to Restore and Protect Our Waters

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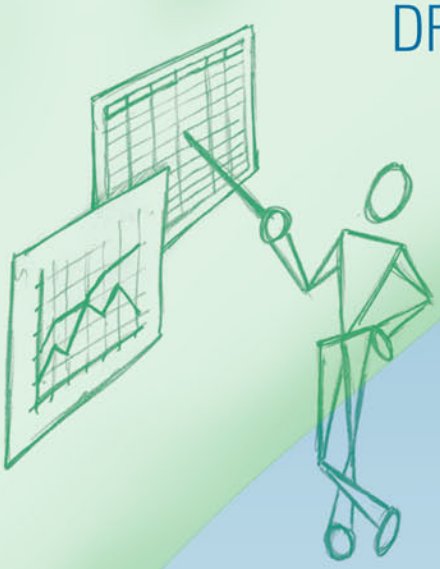

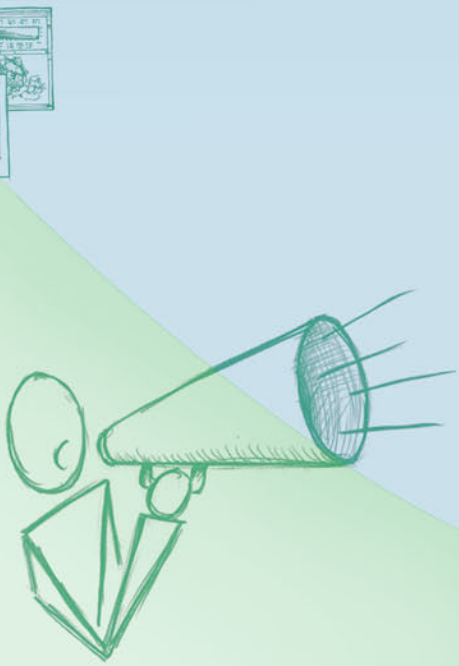

United States Environmental Protection Agency
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Nonpoint Source Control Branch
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Acronyms and Abbreviations

There are dozens of acronyms and abbreviations used throughout this handbook. Refer back to this list to help you navigate through the alphabet soup.

ADB: Assessment Database
ADID: advance identification
AFO: animal feeding operation
AGNPS: Agricultural Non-Point Source model
AnnAGNPS: Annualized Agricultural Non-Point Source model
AIEO: American Indian Environmental Office
ARS: Agricultural Research Service
ASIWPCA: Association of State and Interstate Water Pollution Control Administrators
AU: assessment unit
AVIRIS: airborne visible/infrared imaging spectrometer
AVS: acid-volatile sulfide
BASINS: Better Assessment Science Integrating Point and Nonpoint Sources
BEACH: Beaches Environmental Assessment and Coastal Health
BEHI: Bank Erosion Hazard Index
BLM: [U.S.] Bureau of Land Management
BMP: best management practice
BOR: [U.S.] Bureau of Reclamation
CADDIS: Causal Analysis/Diagnosis Decision Information System
CAEDYM: Computational Aquatic Ecosystem Dynamics Model
CAFO: concentrated animal feeding operation
CBOD: carbonaceous biological oxygen demand
C-CAP: Coastal Change Analysis Program
CCMP: comprehensive conservation and management plan
cfs: cubic feet per second
CH3D-IMS: Curvilinear-grid Hydrodynamics 3D— Integrated Modeling System
CH3D-SED: Curvilinear Hydrodynamics 3D—Sediment Transport
CN: curve number
CNE: curve number equation
CNMP: conservation nutrient management plan
COD: chemical oxygen demand
CRC: Cooperative Research Center
CREM: Council for Regulatory Environmental Modeling
CREP: Conservation Reserve Enhancement Program
CRM: crop residue management
CRP: Conservation Reserve Program
CSC: Coastal Services Center
CSO: combined sewer overflow
CSP: Conservation Security Program

CSREES: Cooperative State Research, Education, and Extension Service
CSTR: continuously stirred tank reactor
CTG: composite theme grid
CTIC: Center for Technology Information Center
CWA: Clean Water Act
CZARA: Coastal Zone Act Reauthorization Amendments
DEM: digital elevation model
DIAS/IDLMAS: Dynamic Information Architecture System/Integrated Dynamic Landscape Analysis and Modeling System
DLG: digital line graphs
DO: dissolved oxygen
DOI: [U.S.] Department of the Interior
DOT: [U.S.] Department of Transportation
DQO: data quality objective
DRG: digital raster graphic
ECOMSED: Estuary and Coastal Ocean Model with Sediment Transport
EDAS: Ecological Data Application System
EDNA: Elevation Derivatives for National Application
EFDC: Environmental Fluid Dynamics Code
EMAP: Environmental Monitoring and Assessment Program
EMC: event mean concentration
EPA: [U.S.] Environmental Protection Agency
EPIC: Erosion Productivity Impact Calculator
EQIP: Environmental Quality Incentives Program
ESA: Endangered Species Act
ETM: enhanced thematic mapper
FEMA: Federal Emergency Management Agency
FGDC: Federal Geographic Data Committee
FHWA: Federal Highway Administration
FSA: Farm Service Agency
GAP: Gap Analysis Project
GIRAS: Geographic Information Retrieval and Analysis System
GIS: geographic information system
GISPLM: GIS-Based Phosphorus Loading Model
GLEAMS: Groundwater Loading Effects of Agricultural Management Systems
GLLVHT: Generalized, Longitudinal-Lateral-Vertical Hydrodynamic and Transport
GPS: global positioning system
GRP: Grasslands Reserve Program
GSSHA: Gridded Surface Subsurface Hydrologic Analysis
GWLF: Generalized Watershed Loading Functions
HBI: Hilsenhoff Biotic Index
HCP: habitat conservation plan
HEC-6: Hydraulic Engineering Center-Scour and Deposition in Rivers and Reservoirs
HEC-6T: Hydraulic Engineering Center-Sedimentation in Stream Networks

HEC-HMS: Hydraulic Engineering Center-Hydrologic Modeling System
HEC-RAS: Hydraulic Engineering Center-Hydrologic Modeling System
HSCTM-2D: Hydrodynamic, Sediment and Contaminant Transport Model
HSPF: Hydrologic Simulation Program–Fortran
HUC: hydrologic unit code
IBI: index of biotic integrity
IDEAL: Integrated Design and Evaluation Assessment of Loadings
I/E: information/education
IMP: integrated management practices
IPM: integrated pest management
kg/ha/yr: kilograms per hectare per year
kg/yr: kilograms per year
KINEROS2: Kinematic Runoff and Erosion Model, v2
lb/d: pounds per day
LID: low impact development
LIDAR: light detection and ranging
LSPC: Loading Simulation Program in C++
LULC: land use/land cover
MDC: minimal detectable change
mg/L: milligrams per liter
MINTEQA2: Metal Speciation Equilibrium Model for Surface and Ground Water
MQO: measurement quality objective
MRLC: Multi-resolution Land Characteristics
MS4: municipal separate storm sewer systems
MSGP: multi-sector general permit
MUIR: map unit interpretation record
MUSIC: Model for Urban Stormwater Improvement Conceptualization
MVUE: Minimum Variance Unbiased Estimator
NASA: National Aeronautics and Space Administration
NAWQA: National Water-Quality Assessment
NCDC: National Climatic Data Center
NDVI: normalized difference vegetation index
NED: National Elevation Dataset
NEIPCC: New England Interstate Pollution Control Commission
NEMI: National Environmental Methods Index
NEP: National Estuary Program
NGO: non-governmental organization
NHD: National Hydrography Dataset
NIR: near-infrared
NLCD: National Land Cover Dataset
NLFA: National Listing of Fish Advisories
NOAA: National Oceanic and Atmospheric Administration
NPDES: National Pollutant Discharge Elimination System

NPS: nonpoint source
NRCS: Natural Resources Conservation Service
NRI: National Resources Inventory
NSFC: National Small Flows Clearinghouse
NSI: National Sediment Inventory
NTTS: National TMDL Tracking System
NTU: nephelometric turbidity unit
NWI: National Wetlands Inventory
NWIS: National Water Information System
O&M: operation and maintenance
OMB: [U.S.] Office of Management and Budget
ORSANCO: Ohio River Valley Water Sanitation Commission
OSM: Office of Surface Mining
P8-UCM: Program for Predicting Polluting Particle Passage through Pits, Puddles, and Ponds - Urban Catchment Model
PAH: polycyclic aromatic hydrocarbon
PBMS: Performance-Based Methods System
PCS: Permit Compliance System
PGC-BMP: Prince George's County Best Management Practice Module
POTW: publicly owned treatment works
PSA: public service announcement
QAPP: quality assurance project plan
QA/QC: quality assurance/quality control
QHEI: Qualitative Habitat Evaluation Index
QUAL2E: Enhanced Stream Water Qaulity Model
RBP: Rapid Bioassessment Protocol
REMM: Riparian Ecosystem Management Model
RF1: Reach File Version 1
RF2: Reach File Version 2
RF3-Alpha: Reach File Version 3 - Alpha
RMP: resource management plan
RPD: relative percent difference
RSAT: Rapid Stream Assessment Technique
RUSLE: Revised Universal Soil Loss Equation
SAMP: Special Area Management Plan
SAP: sampling and analysis plan
SAR: synthetic aperture radar
SCS: Soil Conservation Service
SDWA: Safe Drinking Water Act
SED3D: Three-dimensional Numerical Model of Hydrodynamics and Sediment Transport in Lakes and Estuaries
SEM: simultaneously extracted metals
SET: Site Evaluation Tool
SLAMM: Source Loading and Management Model
SOP: standard operating procedure

SPARROW: Spatially Referenced Regression on Watershed Attributes
SRF: State Revolving Fund
SSO: sanitary sewer overflow
SSURGO: Soil Survey Geographic Database
STATSGO: State Soil Geographic Database
STEPL: Spreadsheet Tool for Estimating Pollutant Load
STORET: Storage and Retrieval
STORM: Storage, Treatment, Overflow, Runoff Model
SVAP: Stream Visual Assessment Protocol
SWA: source water assessment
SWAP: Source Water Assessment Program
SWAT: Soil and Water Assessment Tool
SWCD: Soil and Water Conservation District
SWCP: soil and water conservation plan
SWMM: Storm Water Management Model
SWP: source water protection
SWPP: source water protection plan
SWPPP: stormwater pollution prevention plan
TCEQ: Texas Commission on Environmental Quality
TDS: total dissolved solids
TIGER: Topologically Integrated Geographic Encoding and Referencing
TKN: total Kjeldahl nitrogen
TM: thematic mapper
TMDL: Total Maximum Daily Load
TOC: total organic carbon
TP: total phosphorus
TSI: Carlson's Trophic Status Index
TSP: technical service provider
TSS: total suspended solids
USACE: U.S. Army Corps of Engineers
µS/cm: microsiemens per centimeter
USDA: U.S. Department of Agriculture
USFWS: U.S. Fish and Wildlife Service
USGS: U.S. Geological Survey
USLE: Universal Soil Loss Equation
UTM: universal transverse mercator
VAFSWM: Virginia Field Scale Wetland Model
VFSMOD: Vegetative Filter Strip Model
VSAP: Visual Stream Assessment Protocol
WAMView: Watershed Assessment Model with an ArcView Interface
WARMF: Watershed Analysis Risk Management Framework
WASP: Water Quality Analysis Simulation Program
WATERS: Watershed Assessment, Tracking and Environmental Results System

WATERSHEDSS: WATER, Soil, and Hydro- Environmental Decision Support System
WBD: watershed boundary dataset
WCS: Watershed Characterization System
WEPP: Water Erosion Prediction Project
WHP: wellhead protection
WinHSPF: Interactive Windows Interface to HSPF
WMS: Watershed Modeling System
WQS: water quality standard
WRAS: Watershed Restoration Action Strategy
WRDA: Water Resources Development Act
WWTP: wastewater treatment plant